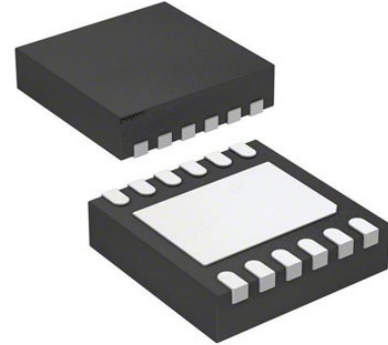


LDO Regulator Pos 1.2V to 5V 0.5A 8-Pin LFCSP EP T/R

Manufacturers	Analog Devices, Inc
Package/Case	8-WFDFN, CSP
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADM7170ACPZ-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADM7170 is a CMOS, low dropout linear regulator (LDO) that operates from 2.3 V to 6.5 V and provides up to 500 mA of output current. This high output current LDO is ideal for regulation of high performance analog and mixed signal circuits operating from 6 V down to 1.2 V rails. Using an advanced proprietary architecture, the device provides high power supply rejection and low noise, and achieves excellent line and load transient response with just a small 4.7 μ F ceramic output capacitor. Load transient response is typically 1.5 μ s for a 1 mA to 500 mA load step.

The ADM7170 is available in 17 fixed output voltage options. The following voltages are available from stock: 1.3 V, 1.8 V, 2.5 V, 3.0 V, 3.3 V, 4.2 V, and 5.0 V. Additional voltages that are available by special order are: 1.5 V, 1.85 V, 2.0 V, 2.2 V, 2.7 V, 2.75 V, 2.8 V, 2.85 V, 3.8 V, and 4.6 V. An adjustable version is also available that allows output voltages that range from 1.2 V to $V_{IN} - V_{DO}$ with an external feedback divider.

Inrush current can be controlled by adjusting the start-up time via the soft start pin. The typical start-up time with a 1 nF soft start capacitor is about 1.0 ms.

The ADM7170 regulator output noise is 5 μ V rms independent of the output voltage. The ADM7170 is available in an 8-lead, 3 mm \times 3 mm LFCSP, making it not only a very compact solution, but also providing excellent thermal performance for applications requiring up to 500 mA of output current in a small, low profile footprint.

Features

Input voltage range: 2.3 V to 6.5 V

Maximum load current: 500 mA

Low noise: 5 μ V rms independent of output voltage at 100 Hz to 100 kHz

Fast transient response: 1.5 μ s for 1 mA to 500 mA load step

60 dB PSRR at 100 kHz

Low dropout voltage: 42 mV at 500 mA load,>

Initial accuracy: \pm 0.75%

Accuracy over line, load, and temperature: \pm 1.25%

Quiescent current,>

Low shutdown current: 0.25 μ A at>

Stable with small 4.7 μ F ceramic output capacitor

Adjustable and fixed output voltage options: 1.2 V to 5.0 V

Adjustable output from 1.2 V to $V_{IN} - V_{DO}$

Precision enable

Adjustable soft start

8-lead, 3 mm \times 3 mm LFCSP package

Supported by ADIsimPower tool

Application

Regulation to noise sensitive applications: ADC and DAC circuits, precision amplifiers, PLLs/VCOs, and clocking ICs

Communications and infrastructure

Medical and healthcare

Industrial and instrumentation

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



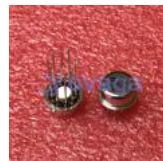
[ADP3367ARZ](#)

Analog Devices, Inc
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[AD636JH](#)

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TO-100-10



[ADP3330ARTZ.3-RL7](#)

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SOT-23-6



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